

Amendments to the Claims

Claim 1 (Previously presented): Hybrid maize seed designated 34M94, representative seed of said hybrid 34M94 having been deposited under ATCC Accession number _____.

Claim 2 (Currently amended): A maize plant, or ~~its parts~~ a part thereof, produced by growing the seed of claim 1.

Claim 3 (Original): Pollen of the plant of claim 2.

Claim 4 (Original): An ovule of the plant of claim 2.

Claims 5-62 (Canceled)

Claim 63 (Previously presented): A tissue culture of regenerable cells produced from the plant of claim 2.

Claim 64 (Previously presented): Protoplasts produced from the tissue culture of claim 63.

Claim 65 (Currently amended): The tissue culture ~~produced from the plant of claim 263~~, wherein cells of the tissue culture are from a tissue selected from the group consisting of leaf, pollen, embryo, root, root tip, anther, silk, flower, kernel, ear, cob, husk and stalk.

Claim 66 (Previously presented): A maize plant regenerated from the tissue culture of claim 63, said plant having all the morphological and physiological characteristics of hybrid maize plant 34M94, representative seed of said plant having been deposited under ATCC Accession No. _____.

Claim 67 (Previously presented): A method for producing an F1 hybrid maize seed, comprising crossing the plant of claim 2 with a different maize plant and harvesting the resultant F1 hybrid maize seed.

Claim 68 (Previously presented): A method of producing a male sterile hybrid maize plant comprising transforming at least one of inbred maize parent plants GE568044 and GE533486, representative samples of which have been deposited as _____ and _____ respectively, with a nucleic acid molecule that confers male sterility and crossing said inbred maize parent plants to produce said male sterile hybrid maize plant.

Claim 69 (Previously presented): A male sterile maize hybrid plant produced by the method of claim 68.

Claim 70 (Previously presented): A method of producing an herbicide resistant hybrid maize plant comprising transforming at least one of inbred maize parent plants GE568044 and GE533486, representative samples of which have been deposited as _____ and _____ respectively, with a transgene that confers herbicide resistance to generate an herbicide resistant inbred maize parent plant and crossing said inbred maize parent plants to produce said herbicide resistant hybrid maize plant.

Claim 71 (Previously presented): An herbicide resistant hybrid maize plant produced by the method of claim 70.

Claim 72 (Previously presented): The herbicide resistant hybrid maize plant of claim 71, wherein the transgene confers resistance to an herbicide selected from the group consisting of: imidazolinone, sulfonylurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

Claim 73 (Previously presented): A method of producing an insect resistant hybrid maize plant comprising transforming at least one of inbred maize parent plants GE568044 and GE533486, representative samples of which have been deposited as _____ and _____ respectively, with a transgene that confers insect resistance to generate an insect resistant inbred maize parent plant and crossing said inbred maize parent plants to produce said insect resistant hybrid maize plant.

Claim 74 (Previously presented): An insect resistant maize plant produced by the method of claim 73.

Claim 75 (Currently amended): The insect resistant maize plant of claim 74, wherein the transgene ~~comprises a transgene encoding~~ encodes a *Bacillus thuringiensis* endotoxin.

Claim 76 (Previously presented): A method of producing a disease resistant hybrid maize plant comprising transforming at least one of inbred maize parent plants GE568044 and GE533486, representative samples of which have been deposited as _____ and _____ respectively, with a transgene that confers disease resistance to generate a disease resistant inbred maize parent plant and crossing said inbred maize parent plants to produce said disease resistant hybrid maize plant.

Claim 77 (Previously presented): A disease resistant hybrid maize plant produced by the method of claim 76.

Claim 78 (Previously presented): A method of producing a hybrid maize plant with decreased phytate content comprising transforming at least one of inbred maize parent plants GE568044 and GE533486, representative samples of which have been deposited as _____ and _____ respectively, with a transgene encoding phytase to generate an inbred maize parent plant with decreased phytate content and crossing said inbred maize parent plants to produce said hybrid maize plant that confers decreased phytate content.

Claim 79 (Previously presented): A hybrid maize plant with decreased phytate content produced by the method of claim 78.

Claim 80 (Previously presented): A method of producing a hybrid maize plant with modified fatty acid metabolism or modified carbohydrate metabolism comprising transforming at least one of inbred maize parent plants GE568044 and GE533486, representative samples of which have been deposited as _____ and _____ respectively, with a transgene encoding a protein

selected from the group consisting of stearyl-ACP desaturase, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme to generate an inbred maize parent plant with modified fatty acid metabolism or modified carbohydrate metabolism and crossing said inbred maize parent plants to produce said hybrid maize plant that confers modified fatty acid metabolism or modified carbohydrate metabolism.

Claim 81 (Previously presented): A hybrid maize plant produced by the method of claim 80.

Claim 82 (Previously presented): The hybrid maize plant of claim 81 wherein the transgene confers a trait selected from the group consisting of waxy starch and increased amylose starch.

Claim 83 (Previously presented): A maize plant, or part thereof, having all the physiological and morphological characteristics of the hybrid maize plant 34M94, representative seed of said plant having been deposited under ATCC Accession No. _____.

Claim 84 (Currently amended): A method of introducing a desired trait into a hybrid maize line 34M94 comprising:

(a) crossing at least one of inbred maize parent plants GE568044 and GE533486, representative samples of which have been deposited under ATCC Accession Nos. as _____ and _____ respectively, with another maize line that comprises a desired trait, to produce F1 progeny plants, wherein the desired trait is selected from the group consisting of male sterility, herbicide resistance, insect resistance, disease resistance and waxy starch;

(b) selecting said F1 progeny plants that have the desired trait to produce selected F1 progeny plants;

(c) backcrossing the selected progeny plants with said inbred maize parent plant to produce backcross progeny plants;

(d) selecting for backcross progeny plants that have the desired trait and morphological and physiological characteristics of said inbred maize parent plant;

(e) repeating the steps of backcrossing to said inbred maize parent plant three or more times in succession to produce selected fourth or higher backcross progeny plants;

(f) crossing said backcross progeny plant with the other inbred maize parent plant to generate a hybrid maize line 34M94 with the desired trait and all of the morphological and physiological characteristics of hybrid maize line 34M94 listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

Claim 85 (Currently amended): A plant produced by the method of claim 84, wherein the plant has the desired trait and all of the physiological and morphological characteristics of hybrid maize line 34M94 listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

Claim 86 (Previously presented): The plant of claim 85 wherein the desired trait is herbicide resistance and the resistance is conferred to an herbicide selected from the group consisting of: imidazolinone, sulfonylurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

Claim 87 (Previously presented): The plant of claim 85 wherein the desired trait is insect resistance and the insect resistance is conferred by a transgene encoding a *Bacillus thuringiensis* endotoxin.

Claim 88 (Previously presented): The plant of claim 85 wherein the desired trait is male sterility and the trait is conferred by a cytoplasmic nucleic acid molecule that confers male sterility.

Claim 89 (Currently amended): A method of modifying ~~introducing modified~~ fatty acid metabolism, ~~modified~~ phytic acid metabolism or ~~modified~~ carbohydrate metabolism ~~intein~~ in a hybrid maize line 34M94 comprising:

(a) crossing at least one of inbred maize parent plants GE568044 and GE533486; representative samples of which have been deposited under ATCC Accession Nos. as _____ and _____ respectively, with another maize line that comprises a desired trait nucleic acid molecule encoding an enzyme, ~~to produce F1 progeny plants, wherein the desired trait is selected~~

from the group consisting of phytase, stearyl-ACP desaturase, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme;

(b) selecting said F1 progeny plants that have ~~the desired trait~~ said nucleic acid molecule to produce selected F1 progeny plants;

(c) backcrossing the selected progeny plants with said inbred maize parent plant to produce backcross progeny plants;

(d) selecting for backcross progeny plants that have ~~the desired trait~~ said nucleic acid molecule and morphological and physiological characteristics of said inbred maize parent plant;

(e) repeating the steps of backcrossing to said inbred maize parent plant three or more times in succession to produce selected fourth or higher backcross progeny plants;

(f) crossing said backcross progeny plant with the other inbred maize parent plant to generate a hybrid maize line 34M94 with ~~the desired trait~~ that comprises said nucleic acid molecule and has all of the morphological and physiological characteristics of hybrid maize line 34M94 listed in Table 1 as determined at ~~a~~the 5% significance level when grown in the same environmental conditions.

Claim 90 (Currently amended): A plant produced by the method of claim 89, wherein the plant has ~~modified fatty acid metabolism, modified phytic acid metabolism or modified carbohydrate metabolism~~ comprises the nucleic acid molecule and has all of the physiological and morphological characteristics of hybrid maize line 34M94 listed in Table 1 as determined at ~~a~~the 5% significance level when grown in the same environmental conditions.

Claim 91 (New): A method for producing a maize seed, comprising crossing the plant of claim 2 with itself or a different maize plant and harvesting the resultant maize seed.